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EXPIRES: 07/31/92

USDA, Forest Service

DIVISION OF  
OIL GAS & MININGPLAN OF OPERATIONS  
FOR MINING ACTIVITIES  
ON NATIONAL FOREST LANDS

Submitted by

Signature

OWNER  
Title10-8-90  
Date

Plan Received by

Signature

Title

Date

## I. GENERAL INFORMATION

- A. Name of Mine/Project \* LEVAN Gypsum
- B. Type of Operation \* Development Production  
(lode, placer, mill, exploration, development, production, other)
- C. Is this a (new/continuing) operation? (CIRCLE ONE) (New Plan of operations)  
If continuing a previous operation, this plan (replaces/modifies) a previous plan of operation. (CIRCLE ONE)
- D. Proposed start-up date of operation 15<sup>th</sup> Oct. 1990
- E. Proposed duration of operations continuing -
- F. Proposed seasonal reclamation close-out date continuing

## II. PRINCIPALS

- A. Name, address and phone number of operator \* J.W. Dawsie  
328 S 200 West Nephi, Utah 84648  
623-2332 office 623-2447 home
- B. Name, address, and phone number of authorized field representative (if other than the operator). Attach authorization to act on behalf of operator.

\* (NONE)

- C. List the owners of the claims (if other than the operator)

\* Robert Steele, Christy Steele, Robby Steele, and  
Angela Steele

8 (NENE)

**Name of claim and the legal land description where the operation will be conducted.**

MMC #	Name	Section	Township	Range
1	Security #1	South 1/2 of 33	14 S.	1 E
	Security #2	4	15 S	1 E.
	" 3	"	"	"
	" 4	"	"	"

A. Access. Show on a map (USGS quadrangle map or a National Forest map, for example) the claim boundaries and describe and show on the map all access needs, on and off the claim. Specify what Forest Service existing roads will be used, where maintenance or reconstruction is proposed and where any new construction is necessary. For new construction, include construction specifications such as widths, grades, etc. Show location and size of culverts. Describe maintenance plans. Describe the type and sizes of vehicles and equipment that will be traveling the access routes.

equipment that will be traveling the access routes.  
TD-20 300atran track 10 wheel Dump  
Bulldozers, Loaders, Drills, Rock Trucks, all Equipment  
necessary for open pit mining  
② The Road will be ~~made~~ made wider to make it safe to  
Travel. app. 800 ft of new Road will be made on private land

B. Attach map, sketch or drawing showing location and layout of the area of operation. Include names and locations of any streams, creeks, and springs. Describe and explain on the map the type of operation, method or techniques you propose (examples: drilling, open pit mining, dredging, milling, etc.; include locations, capacity, size, amount, etc.). Show on the map and describe below the size and kind of all surface disturbance, such as trenches, pits, settling ponds, stream channels and run-off diversions, waste dumps, drill pads, timber disposal or clearance, etc. Include sizes, capacities, acreage, amounts, locations, materials involved, etc.

See map

- C. Project Description. Describe aspects of the operation: how clearing will be accomplished, topsoil stockpiled, waste rock placed, tailing disposed of, etc. Calculate production rates and total volumes of waste rock and ore. Include justification and calculations for settling pond capacities and sizing of runoff diversion channels.

1. For first 12 months:

- #1 \* Road will be widened to App 20 ft wide with a two foot bumper, yard will be improved as to turn trucks around. Road will be put in contact with Gypsum for access to Drilling. Gypsum will be drilled and shot. Then pushed into stockpile at bottom of Gypsum pond. Loaders will load Trucks and Gypsum will be Hauled To mill site.
- (X) Any top soil will be put in pile on yard and ~~be~~ be Redistributed when mining has been completed.
- (\*) Runoff will be controlled with 3 foot bumper around yard

2. For total life of project:

- \* Plan will be updated if necessary.

- D. Describe the Equipment and Vehicles you propose to use in your operation (Examples: drill, dozer, wash plant, mill, etc.). Include: sizes, capacity, frequency of use, etc.

\* TD 20 Dozer

3000 Trogen loader

Track: Drill

10 wheel Dump Trucks

- E. Structures. Describe and include justification for the structures or facilities planned for the operation. Include such things as storage sheds, mill buildings, thickener tanks, fuel storage, powder magazines, pipe lines, water diversions, trailers, sanitation facilities, etc. Include justification and calculations for sizing of tanks, pipelines and water diversions. The fuel storage facilities should include containment structures that will hold the volume of the largest storage tank in case of a tank failure or leak. Show the locations on the sketch map.

\* None

#### V. ENVIRONMENTAL PROTECTION MEASURES (SEE 36 CFR 228.8)

- A. Air Quality. Describe measures to be taken to minimize impacts on air quality such as obtaining a burning permit for slash disposal or dust abatement on roads.

Will meet Air Quality Standards

B. **Water Quality.** State how applicable state and federal water quality standards will be met. Describe what measures or management practices will be used to minimize water quality impacts and meet applicable standards.

1. If water is to be used in the operation (processing ore, washing ore, solution make-up, etc.) state how the water will be stored, treated and disposed of. If ponds of any type are proposed, such as for storage or settling, state how they will be designed and built. Provide storage capacities and water balance calculations. State how ponds will be maintained on an annual basis.
2. Describe methods to control runoff and erosion to prevent entry into surface water for all disturbed areas, including waste and tailings dumps.
3. Describe proposed surface water and groundwater quality monitoring, if required, to demonstrate compliance with federal or state water-quality standards.
4. Describe what measures will be used to minimize potential water quality impacts during winter closure, if applicable.
5. If land application is proposed for wastewater disposal, the location and operation of the land application system should be described.

\* None

C. **Solid Wastes.** State how any tailing, dumpage, or other waste produced by operations will be disposed of or treated so as to minimize adverse impacts. Include a statement that all unburnable garbage and refuse will be hauled off-Forest to a sanitary landfill.

\* Solid Waste will be hauled to Land Fill

D. **Scenic Values.** State how scenic values will be protected. Examples are screening, slash disposal, timely reclamation, etc.

\* None

- E. Fish and Wildlife. All practicable measures to maintain and protect fisheries and wildlife habitat affected by the operations must be taken, and should be defined. Most of those measures involve avoidance of critical habitat such as along streams and bogs when planning roads, dumps, etc. Opportunities during reclamation to prevent erosion or plant browse or forage species should be described.

\* None

- F. Cultural Resources. Describe procedures for protection of historic and archeological values. The Forest Service is responsible for insuring that the area to be covered by the operating plan is inventoried prior to plan approval to determine the presence of significant cultural resources and will specify protective and/or mitigation measures to be taken by the operator. If previously undiscovered cultural resources (historic or prehistoric objects, artifacts, or sites) are exposed as a result of operations, the operator shall not proceed until he is notified by the District Ranger that he has complied with provisions for mitigating unforeseen impacts as required by 36 CFR 228.4(e) and 36 CFR 800.

\* None

- G. List all hazardous substances (by name and quantity required) which you intend to use or generate during the proposed operation. Operations USING or GENERATING HAZARDOUS SUBSTANCES must attach copies of other Federal and State agency permits, including all stipulations and conditions pertaining to the permit.

\* None

- H. With regard to hazardous substances, discuss handling, storage, security (fencing), identification (signing), or other special operations requirements necessary to conduct the proposed operation.

Will not store on site

1. Close-out Reclamation. This section should describe the removal of structures and facilities, and the reclamation of the access road. It should specify that roads no longer needed: (1) be closed, (2) bridges and culverts be removed, (3) cross drains, dips, or water bars be constructed, and (4) the road surface be shaped to as near a natural contour as practicable and be stabilized. Show the expected date for completion of all reclamation.

Ⓢ Redistribute Top soil and Reseed

Ⓢ Pit will Be recontoured to the extent possible.

## VI. FOREST SERVICE EVALUATION OF PLAN OF OPERATIONS

- A. Recommended Changes/Modifications for Plan of Operations: \* In addition to the environmental protection measures included in this Plan of Operation and the amendments received on October 31, 1990, December 10, 1990 and January 8, 1991 the following Mitigations (1-18), Legal and Regulatory Requirements (1-2), and Additional Mitigation Measures (1-8) are recommended (See Attached).

- B. Bond - As a further guarantee of faithful performance with the reclamation requirements agreed upon in the plan of operations, the operator delivers herewith and agrees to maintain a surety bond, cash, bond, irrevocable letters of credit in the sum of \* \_\_\_\_\_ (\$\* \_\_\_\_\_).

## ACKNOWLEDGEMENTS

- A. It is understood that should the nature of the operation change a modified or supplemental plan of operations may be required.
- B. It is understood that approval of this plan of operations does not constitute: (1) Certification of ownership to any person named herein; and (2) Recognition of the validity of any mining claim named herein.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

### Standard Forest Service Mitigations

1. Approval of the Plan of Operations does not constitute recognition or certification of the validity of ownership by any person named as owner therein.
2. Approval of this Plan of Operations does not constitute now or in the future, recognition or certification of the validity of any of the mining claims to which it may relate nor the mineral character of the land on which it lies.
3. Changes and additions to the approved Plan of Operations must be submitted to the District Ranger for approval as a revised or supplemental plan. The revised or supplemental Plan of Operations must be approved by the District Ranger before work may begin.
4. The operator shall furnish and maintain a reclamation bond in the amount of \$38,000 conditioned upon compliance with the terms and conditions of approval of the Plan of Operations. (Note: Reclamation does not include fire liability or other actions in connection with the operator.)
5. The District Ranger must be notified of the intent to establish a temporary camp or living quarters for company employees or contractors. Approval must be obtained from the District Ranger prior to construction or occupancy of such facilities.
6. All surface disturbing activities and operations must be supervised by a company representative knowledgeable of the terms and conditions of approval of the Plan of Operations.
7. Section corners or other survey markers within the project area must be flagged for preservation prior to commencement of surface disturbing operations. The removal, displacement, or disturbance of markers must be approved by the proper authority.
8. All surface disturbing operations must cease in the event that archeological or cultural resources are unearthed or discovered. The District Ranger or his designated representative must be immediately notified of the situation. Operations may again commence upon Forest Service approval.
9. Harassment of wildlife and livestock is prohibited.
10. The operator is responsible for immediate repairs of any and all damages to roads, structures, and improvements, which result from his operations, at his own expense.
11. Gates and livestock fences must be kept closed unless otherwise posted.

12. All equipment and debris must be removed from the National Forest upon completion of operations. All trash and garbage must be properly disposed of at an approved refuse area. Disposal or burial of any such materials in mud pits or other areas, or by burning, on the National Forest is prohibited.
13. Water must be legally obtained in accordance with State water laws.
14. Vehicle operators must maintain safe speeds commensurate with existing road traffic and weather conditions.
15. Removal of vegetation must be limited to that necessary for operations. Removal or trimming of trees must be avoided whenever possible.
16. Adequate fire suppression equipment must be readily available to employees and contractors at the project site. This would include at least one hand-held implement per man consisting of shovels and axes and one fire extinguisher per vehicle.
17. All motorized equipment will have working mufflers and spark arresters. Electrical equipment must be properly insulated. Vehicles equipped with catalytic converters will be parked in clear areas to avoid igniting potential fuels such as grass and brush.
18. The District Ranger or his designated representative must be notified when operations are completed and informed as to when reclamation work will begin.

#### The legal and regulatory requirements

1. The operator is responsible for compliance to all applicable State and Federal laws and regulations.
2. The operator is responsible for compliance to the Forest Service regulations on locatable minerals 36 CFR Part 228, subpart A. These regulations contain requirements for environmental protection, safety, cessation of operations and annual reporting, fire prevention, access, bonding, and other aspects of locatable mineral development on Forest System Lands.

#### Additional Mitigation Measures

1. The operator must notify the District Ranger 3 days in advance of commencing operations. A Forest Service archeologist or para-professional archeologist must be present on the site when operations begin to provide for protection of cultural resources.

2. Through negotiations with the Forest Service the operator has agreed to operate only during the period of April 15 thru November 15 to minimize wildlife disturbance. Minimize disturbance to area so as to leave juniper and pinyon trees for wildlife thermal cover.
3. Hazardous sections of highwall will be removed prior to shut down of operations for more than one week.
4. In addition to the mitigation measures, listed above, reclamation is to include: (a) reseeding of all disturbed areas including the access road. The following seed mixture will be used:

#### SEED MIX FOR GYPSUM MINE RECLAMATION

<u>Grass</u>		<u>lbs/Acre</u>
Agropyron cristatum	Crested wheat grass (Ephraim)	3
Agropyron intermedium	Intermediate wheat grass	2
Dactylis glomerata	Orchardgrass	1
Oryzopsis hymenoides	Indian ricegrass	1
Agropyron smithii	Bluestem wheatgrass	2
Lolium perenne	Perennial ryegrass	2
<u>Forbs</u>		
Melilotus officinalis	Yellow sweetclover	1
Medicago sativa - Ladak	Alfalfa	1
Aster glaucodes	Blueleaf aster	1/2
Hedsarum boreale	Northern sweetvetch	1/2
Sanguisorba minor	Small burnet	1
		<u>15 lbs/Acre</u>

Reclamation success will be judged by using the following standard:

Revegetation will be considered successful when 80 percent of the pre-disturbance ground cover is re-established over the entire disturbed area. Adjacent undisturbed areas will be used as a base for comparison.

Ground cover will include (% each must be consistent with surrounding undisturbed area):

1. Live perennial basal herbaceous vegetation.
2. Accumulated dead plant litter.
3. Rock fragments over 3/4 inch diameter.

Of the vegetative ground cover, at least 90 percent must consist of seeded or other desirable species. At least eight separate species must be present. The maximum allowable weed content is 10 percent with no noxious weed species.

(b) Reclamation be done, concurrent with mining operation.

5. Reconstruct the road in accordance with road standards outlined in the Road Management Objectives Report (Appendix 6). Maximum subgrade width of 17 feet.
6. The operator will take all appropriate measures to minimize impacts to visual quality. Measures will include but are not limited to painting culverts and any other appurtenances colors that will blend in the the surrounding area.
7. Initiate slope rounding to blend to new landform modifications with existing landforms to maintain visual quality.
8. Initiate erosion control practice that will keep sediment out of channels and protect the channel crossings. An acceptable design at the channels would be to use large rock that would withstand the flows but allow the water to flow through.

- C. It is understood that a bond equivalent to the actual cost of performing the agreed upon mitigation and reclamation measures may be required before this plan can be approved.
- D. It is understood that approval of this plan does not relieve me of my responsibility to comply with any other applicable State or Federal laws, rules or regulations.
- E. It is understood that any information provided with this plan that is marked confidential will be treated by the agency in accordance with that agency's laws, rules and regulations.

I/We have reviewed and agree to comply with all conditions in this plan of operations, including the recommended changes and reclamation requirements. I/We understand that the bond will not be released until the Forest Officer in charge gives written approval of the reclamation work.

\_\_\_\_\_  
(Operator (or Authorized Official))

\_\_\_\_\_  
(Date)

OPERATING PLAN APPROVAL:

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Authorized Officer)

\_\_\_\_\_  
(Date)

Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0596-0022), Washington, D.C. 20503.

Appendix 1.2

M/023/016

Oct. 31, 1990

Additional Information for operating Plan  
as Requested by Oct 30th 1990 letter  
To be Included in operating Plan  
submitted 10-8-90

Robert L Steele  
J.W. Danner

## Part F Reclamation

- ① Reclamation will be accomplished according to  
\* Form M.R.-SMD Here to Attached Items ~~1~~ 1 through  
14. According to Forest Service Supervision

IV. OPERATION AND RECLAMATION PRACTICES (Rule R613-003-107 & 108)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover. To accomplish this, the operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining:

1. Keep the mining operation in a safe, clean, and environmentally stable condition.
2. Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
4. Construct berms, fences, or barriers, when needed, above highwalls and excavations.
5. Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
6. Remove all waste or debris from stream channels.
7. Dispose of any trash, scrap metal, wood, machinery, and buildings.
8. Conduct mining activities so as to minimize erosion and control sediment.
9. Reclaim all roads that are not part of a permanent transportation system.
10. Stockpile topsoil and suitable overburden prior to mining.
11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.
12. Properly prepare seedbed to a depth of six inches by ripping, discing, or harrowing.
13. Reseed disturbed areas with adaptable species. (The Division recommends seeding 20 lbs./acre of native and introduced species of grass, forb, and browse seed, and will provide a specific species list if requested.)
14. Plant the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4-1/2 inch into the soil - fall is the preferred time to seed.

#### Sec. IV Description of Operation, Part C

⊕ As mining progresses all vegetation will be stockpiled and burned when conditions allow under direction of Forest Service.

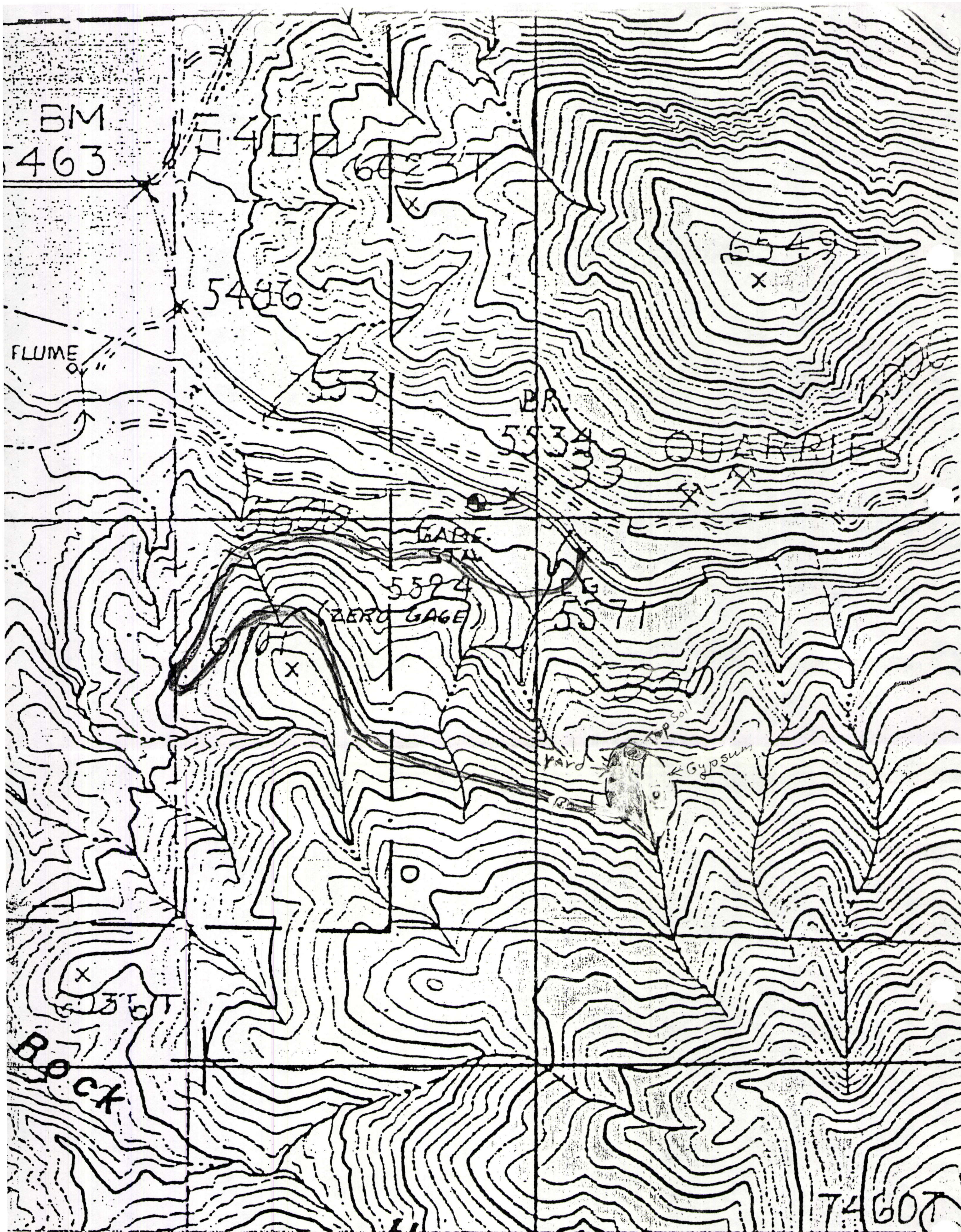
⊕ All unsuitable material (waste rock) will be used for Riprap or be used for Rechap material. This should be less than 100 Cub. yards.

⊕ Topsoil where encountered in mining operation will be stripped and stockpiled for future redistribution in mine Reclamation.

⊕ Quarry will be operating from April 1st To Dec. 1st

## Sec. V Environmental Protection Measures

- +⊕ A. If Dust becomes unacceptable according to State Standards Road will be sprinkled with water
- B. Road will be water bared and further drainage structures will be instated as needed
- + All hazardous Substance will be handled according to State and Federal Regulation  
(Powder, Caps, Dep. Card, Fuse)
- D. Reclamation will be completed at the End of mining activity
- +⊕ E. operations will be from April 1<sup>st</sup> to Dec. 1<sup>st</sup> in consideration of wintering ~~weather~~ Wildlife
- +⊕ C. we will comply with all State and Fed. Requirements concerning ~~solid~~ Waste Disposal
- ⊕ H Gates and signs will be installed on county roads
  - + to warn the public and to block public Access from operations
  - + No Explosives will be stored at mine.
  - + No highwall are anticipated on this operation



LEVAN Gypsum  
Steele Property

Sec. 33 T. 14 S  
R. 1 E S. 1 M. B.

Road  
Yard  
Top Soil  
Gypsum

Section IV Description of Operation Part B.

Total Areas of Disturbance on N.M.F. Equals 3 Areas

30,000 Tons of Gypsum will Be Removed per Year

A Gate and Warning Signs will be placed at The County Road to stop public use of the Road